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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/583,259

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EXAMINER

OBAYANJU, OMONIYI

ART UNIT

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2617

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/583,259	Applicant(s) MAGNUSSON ET AL.	
	Examiner OMONIYI A. OBAYANJU	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-33,35-44,46,50 and 51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24-33,35-44,46,50 and 51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10/26/2009, 06/16/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 24-51 have been considered but are moot in view of the new ground(s) of rejection.

However, Applicant's argument with respect to claims 24-46 have been further reviewed, which are not found persuasive.

In regards to independent claims 24, 35, and 46, Applicant argues that the secondary prior art reference (Bhagwat et al) fails to disclose "a communication system with a plurality of access networks using different access technologies, and thus, no disclosure of determining which access network provides the best connection to a terminal".

Applicant further argues and/or stated that the combination of the primary prior art reference (D'Argence et al.) and the secondary prior art reference (Bhagwat et al) is not understood, and thus it does not teach the limitations of independent claims 24, 35, and 46.

In response the Examiner respectfully disagrees with Applicant's arguments at least for the following reasons;

First, the Examiner did not alleged that Bhagwat et al. disclosed "a communication system with a plurality of access networks using different access

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technologies, and thus, no disclosure of determining which access network provides the best connection to a terminal". However, as presented in the previous office actions, the **primary prior art reference, D'Argence et al.** teaches a communication system with a plurality of access networks using different access technologies, and thus, no disclosure of determining which access network provides the best (use the optimum one of the access system) connection to a terminal (pg. 2, last paragraph-pg. 3, lines 1-3).

D'Argence et al. further discussed and/or described the process of extracting (retrieving or obtaining or listening or generating) relevant access information (cell measurement) (pg. 16-17). However D'Argence fails to specifically teach "extracting the relevant access information by **sniffing**".

The term and/or technique "**Sniffing**" is well known and understood by any one of ordinary skill in the art as a method and/or a system of intercepting or capturing packet or data information, e.g. packet analyzers which is also known as network analyzers or protocol analyzers or sniffer or Ethernet sniffer or wireless sniffer, etc.

Therefore, given the independent claimed limitations its' broadest reasonable interpretation, the claim does not uniquely and particularly define the term "extracting the **relevant access information by sniffing**" so as to distinguish from the applied prior art. During patent examination, the claims must be given their broadest reasonable interpretation. See also MPEP §2111. The term "extracting the **relevant access information by sniffing**" is broadly claimed, therefore, broadly interpreted. Broadly interpreted, "extracting the **relevant access information by sniffing**" is fairly characterized as discussed in Bhagwat et al. **pg. 5, pp0072, pp0073 and pp0076.**

In conclusion, it would have been obvious to one of ordinary skill in the art to modify the method and/or mechanism of extracting (retrieving or obtaining or listening or generating) relevant access information (cell measurement) of D'Argence's system with the well known sniffing method of capturing information data in Bhagwat's system as discussed in the previous office action.

In regards to dependent claims 29, 40, 33, and 44, Applicant argues and/or stated that the Examiner relies on D'Argence for the feature "wherein at least part of the access relevant information is extracted by sniffing user plane traffic for at least one terminal, which access relevant information is used to calculate traffic volume and/or throughput of the at least one terminal." Even though the Examiner already admitted that D'Argence fails to teach at least in part **"extracting the relevant access information by sniffing"**.

In response the Examiner respectfully disagrees with Applicant's argument. The Examiner did not allege that **D'Argence et al** only taught the limitations as presented in the dependent claims. The dependent claims 29, 40, 33, and 44, are directly or indirectly dependent on the already addressed independent claims 24 and 35, which have been clearly rejected by the prior art references **D'Argence et al** in view of **Bhagwat et al**. As further discussed above, **D'Argence et al** in view of **Bhagwat et al**. teaches the limitations of independent claims 24 and 35, which also includes the limitation of **extracting the relevant access information by sniffing**.

Therefore, the Examiner presented the claimed limitation as it is in order to avoid unnecessary repetition of the already discussed limitation. However, in order to clarify the rejection, the Examiner will include the heading "**D'Argence et al** in view of **Bhagwat et al**".

Response to Amendment

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 24-26, 28, 29, 32, 33, 35-37, 39, 40, 43, 44, and 46, are rejected under 35 U.S.C. 103(a) as being unpatentable over D'Argence et al.

(International Publication No. WO 02104054) in view of Bhagwat et al. (US Publication No. 20050128989).

As to claims 24, 35, and 46, D'Argence teaches a method for managing radio resources for providing wireless access to a communication system to a number of terminals, wherein the communication system comprises a first access network using a first access technology and a second access network using at

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least one second access technology different from the first access technology (pg. 1, lines 8-17), wherein the method comprises the steps of: receiving access relevant information (pg. 4, lines 1-11) from the first access network and the second access network (fig. 5 and pg. 15 lines 22-24), comparing the received access relevant information extracted from messages sent within the first access network to access relevant information received from the second access network (pg. 17, lines 4-15); wherein the access relevant information is expressed in comparable quantities (cell measurements) (pg. 17, lines 4- 25) and determining which access network provides a best connection (quality of service to a terminal and which access network should be accessed based on at least a result of the comparison of the received access relevant information extracted from messages sent within the first access network to the access relevant information received from the at least one second access network (pg. 17, lines 14-18 and pg. 19, lines 1-3). Also, discloses a selection manager (fig. 1, CRRM #18). However, D'Argence fails to teach wherein the access relevant information comprises information extracted by sniffing messages sent within the first access network that describes a state of at least one of the access networks based on signal measurements and/or load measurements; wherein the messages are sniffed by a listening agent and are directed to an entity in the first access network other than the listening agent, and wherein sniffing a message includes reading a source address, a destination address, and a data payload of the sniffed

message without influencing the sniffed message; and the access network which provides a best connection to a terminal.

But, Bhagwat teaches wherein the access relevant information (address information) comprises information extracted by sniffing messages sent within the first access network that describes a state (wireless activity) of at least one of the access networks based on signal measurements and/or load measurements (RSSI) (pg. 5, pp0072, and pp0073); wherein the messages are sniffed by a listening agent (sniffer, fig. 1, #122) and are directed to a entity in the first access network other than the listening agent (fig. 1), and wherein sniffing a message includes reading a source address (transmitter address), a destination address (receiver address), and a data payload of the sniffed message without influencing the sniffed message (pg. 5, pp0073, and pg. 6, pp0076). Thus it would have been obvious to one of ordinary skill in the art at time the invention was made to combine the teachings of D'Argence with the method of sniffing information in Bhagwat's system to achieve the goal of removing only the desired configuration information from a packet in a communication system.

As to **claims 25 and 36**, D'Argence teaches wherein the first access network is a wireless local area network (pg. 3, lines 11-13).

As to **claims 26 and 37**, D'Argence teaches wherein at least part of the messages sent within the first access network (fig. 1, #6) are messages sent between access points (fig. 1, #10) and (pg. 7, lines 8-11).

As to **claim 28 and 39**, D'Argence teaches wherein the extracted access relevant information comprises an identification of a terminal and an identification of an access point that the terminal has associated with (pg. 19, lines 4-10).

As to **claims 29 and 40**, D'Argence in view of Bhagwat teaches wherein at least part of the access relevant information is extracted by sniffing user plane traffic for at least one terminal (pg. 13, lines 24-29), which access relevant information is used to calculate traffic volume and/or throughput of the at least one terminal (pg. 19, lines 1-3).

As to **claims 32 and 43**, D'Argence teaches wherein at least part of the messages sent within the first access network are sent between at least one terminal and an access point (pg. 1, lines 1-7).

As to **claims 33 and 44**, D'Argence in view of Bhagwat teaches wherein at least part of the access relevant information extracted by sniffing messages sent within the first access network indicates how frequently a channel was busy, which indicates a load of the channel (pg. 4, lines 10-11).

Claims 27 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over D'Argence et al (International Publication No. WO 02104054) in view of Bhagwat et al. (US Publication No. 20050128989) and further in view of Lee et al (US Patent No. 6657981).

As to claims 27 and 38, D'Argence in view of Bhagwat teaches the limitations of claim 26 and 37 as discussed above. However they fail to teach defining the message by the Inter-Access Point Protocol (IAPP). Lee teaches an (IAPP) manager used to transfer handover information between access points in a communication network (fig. 5). Thus it would have been obvious to one of ordinary skill in the art at time the invention was made to combine the teachings of D'Argence in view of Bhagwat with the teachings of Lee to achieve the goal of efficiently and accurately transferring information within access points in a wireless communication system.

Claims 30 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over D'Argence et al (International Publication No. WO 02104054) in view of Bhagwat et al. (US Publication No. 20050128989) and further in view of Nikkelen (US Publication No. 20030207688).

As to claims 30 and 41, D'Argence in view of Bhagwat teaches the limitations of claim 24 and 35 as discussed above. However they both fail to teach wherein at least part of the messages sent within the first access network are sent between access points and a router. Nikkelen teaches a core network node used to communicate from the core network through the first type of mobile radio system which includes a radio access network and a base station (fig. 2, #20 and #26). Thus it would have been obvious to one of ordinary skill in the art

at time the invention was made to combine the teachings of D'Argence in view of Bhagwat with the teachings of Nikkelen to achieve a perfect link to transfer data between components of a wireless communication system.

Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over D'Argence et al (International Publication No. WO 02104054) in view of Bhagwat et al. (US Publication No. 20050128989) and further in view of Brahmbhatt et al (US Publication No. 20060116170).

As **to claim 31**, D'Argence in view of Bhagwat teaches the limitations of claim 24 as discussed above. However they both fail to teach defining the message by the Light Weight Access Point Protocol (LWAPP). Brahmbhatt teaches using (LWAPP) specification may determine which access point to associate with, also the messages includes a network ID(pg. 6, pp0052, lines 1-6). Thus it would have been obvious to one of ordinary skill in the art at time the invention was made to combine the teachings of D'Argence in view of Bhagwat with the teachings of Brahmbhatt to achieve the goal of efficiently and accurately transferring information within access points in a wireless communication system.

Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over D'Argence et al (International Publication No. WO 02104054) in view of Bhagwat et al. (US Publication No. 20050128989) and Nikkelen (US Publication No.

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20030207688), and further in view of Brahmbhatt et al (US Publication No. 20060116170).

As to **claim 42**, D'Argence in view of Bhagwat and Nikkelen teaches the limitations of claim 41 as discussed above. However they fail to teach defining the message by the Light Weight Access Point Protocol (LWAPP). Brahmbhatt teaches using (LWAPP) specification may determine which access point to associate with, also the messages includes a network ID(pg. 6, pp0052, lines 1-6). Thus it would have been obvious to one of ordinary skill in the art at time the invention was made to combine the teachings of D'Argence in view of Bhagwat and Nikkelen with the teachings of Brahmbhatt to achieve the goal of efficiently and accurately transferring information within access points in a wireless communication system.

Claims 50 and 51, are rejected under 35 U.S.C. 103(a) as being unpatentable over D'Argence et al (International Publication No. WO/02104054) in view of Bhagwat et al. (US Publication No. 20050128989) and further in view of Laroia et al. (US Publication No. 20050124344).

As to claims 50 and 51, D'Argence in view of Bhagwat teaches the limitations of claims 24 and 35 as discussed above. However they both fail to teach wherein when the access relevant information (signal strength) is

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expressed in non-comparable quantities (signal strength from different sector) (pg. 5, pp0049), the method further comprises converting (deriving) access relevant information from at least one of the first and second access networks to an access-independent quantity (information derived based on beacon signal) (pg. 11, pp0086) before performing the comparison of the access relevant information extracted from the first access network to the access relevant information received from the at least one second access network (pg. 7, pp0059). Thus it would have been obvious to one of ordinary skill in the art at time the invention was made to combine the teachings of D'Argence in view of Bhagwat with the teachings of Laroia to achieve the goal of efficiently and accurately manipulating information data from multiple communication systems to transfer information within the optimum network in a wireless communication system.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory

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action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OMONIYI A. OBAYANJU whose telephone number is (571)270-5885. The examiner can normally be reached on Mon - Fri, 7:30 - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent P. Harper can be reached on 571-272-7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/O. A. O./
Examiner, Art Unit 2617

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